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Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/531,246

Filing Date: April 14, 2005

Appellant(s): HARRIS, ROBERT

Scott D. Paul
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 14, 2010 appealing from the Office action mailed August 17, 2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1, 13, and 20 – 37 are pending and rejected and are on appeal.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

US 2003-0130993 A1 Mendelvitch et al. July 10, 2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Information Disclosure Statement

1. The listing of references in the Search Report is not considered to be an information disclosure statement (IDS) complying with 37 CFR 1.98. 37 CFR 1.98(a)(2) requires a legible copy of: (1) each foreign patent; (2) each publication or that portion which caused it to be listed; (3) for each cited pending U.S. application, the application specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion, unless the cited pending U.S. application is stored in the Image File Wrapper (IFW) system; and (4) all other information, or that portion which caused it to be listed. In addition, each IDS must include a list of all patents, publications, applications, or other information submitted for consideration by the Office (see 37 CFR 1.98(a)(1) and (b)), and MPEP § 609.04(a), subsection I. states, "the list ... must be submitted on a separate paper." Therefore, the references cited in the Search Report have not been

considered. Applicant is advised that the date of submission of any item of information or any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the IDS, including all "statement" requirements of 37 CFR 1.97(e). See MPEP § 609.05(a).

2. The information disclosure statement filed **4/14/2005** fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

4. The information disclosure statement filed **4/14/2005** fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the applicant has not

provided a full copy of documents needed to be submitted with the 371 application, copies of the non-patent literature and references listed in the IDS, and has not provided a copies of references listed in the specification, such as ¶ 6 regarding the UDDI website. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Rejections - 35 USC § 112, first paragraph

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. **Claims 1, 13, 21 – 27, and 31** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, the Examiner asserts that there is no support for

(1 and 13) computer hardware,
(Claim 13) a database, and

(Claim 31) upon a stored preference not being available, the service using the directory making the selection

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claim 1, 13, and 21 – 37** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. **Claims 1 and 13** are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: **the step of ranking the services.**

10. In regards to **claim 29**, it is unclear how the claim is being performed since the service never made a selection to begin with and, as a result, it is unclear what is being overwritten.

11. **Claim 30** recites the limitation "**the preferred service**" in **line 2 of claim 30**. There is insufficient antecedent basis for this limitation in the claim.

12. In regard to **claim 30**, it is unclear what is meant by "obtained by reference to original preference." Specifically, was there another preference present in the claim, which results in referring back to the original preference? What is the original preference?

13. In regards to **claim 31**, when was the preference stored? Since it was never stored when would this step never occur?

Claim Rejections - 35 USC § 101

14. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

15. **Claims 1 and 21 – 31** are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to an examiner is that a § 101 process must (1) be tied to a particular machine or apparatus or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780, 787-88 (1876).

To qualify as a § 101 statutory process, the claim should recite the particular machine or apparatus to which it is tied, for example by identifying the machine or apparatus that accomplishes the method steps, or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

There are two corollaries to the machine-or-transformation test. First, a mere field-of-use limitation is generally insufficient to render an otherwise ineligible method claim patent-eligible. This means the machine or transformation must impose meaningful limits on the method claim's scope to pass the test. Second, insignificant extra-solution activity will not transform an unpatentable principle into a patentable

process. This means reciting a specific machine or a particular transformation of a specific article in an insignificant step, such as data gathering or outputting, is not sufficient to pass the test.

Here, applicant's method steps fail the first prong of the new test because the claimed invention fails to set forth a particular machine that is specifically configured/programmed to carry out the claimed invention. Specifically, the Examiner asserts that the current claim language can be interpreted that the user, not the apparatus, is performing the claimed invention. Although, computer hardware is disclosed it is being interpreted that the computer hardware is nothing more than an insignificant extra solution activity since it is being understood that the user, through the use of the device, is performing many, if not all, of the disclosed steps of the method.

To be more specific, the claims have failed to set forth the particular piece of equipment or machine that is specifically programmed to carry out, at least, the indicating, invoking, finding, and applying steps of the claimed invention. As it is being understood, it is the user, not the computer hardware, which is responsible for carrying out these claimed steps.

Further still, the Examiner further asserts that each of the steps have not been tied to any type of structure. The applicant has claimed a ranking machine, but has failed to set forth whether this is just machine code, i.e. state machine or the like, or whether it is an actual computer specifically programmed to carryout the claimed steps.

As a result, the Examiner asserts that the claimed computer hardware is nothing more than an insignificant extra solution activity since the claims have failed to set forth

the specific structure of programming that has been performed to render the computer hardware a particular machine that has been created to carryout the claimed steps.

With that said, it is being understood that it is the user performing the claimed steps and that the user is just using the computer hardware as a means of inputting and viewing information.

Further, applicant's method steps fail the second prong of the test because there is no transformation of the data. It is asserted that the data has not been transformed into another state or into another object.

The applicant is reminded that:

"Purported transformation or manipulations simply of public or private legal obligations or relationships, business risks, or other such abstractions cannot meet the test because they are not physical objects or substances, and they are not representative of physical objects or substances."

(*In re Bernard L. Bilski and Rand A. Warsaw Page 28*)"

Moreover, the "transformation must be central to the purpose of the claimed process.

(*In re Bernard L. Bilski and Rand A. Warsaw Page 28*)"

16. **Claim 13** are rejected under 35 U.S.C. 101 because the applicant is claiming a system with no structural components. As best understood by the Examiner from the applicant's specification, the limitations set forth in the claims are directed to software and software, per se, is not statutory. Moreover, the Examiner notes that the applicant is claiming the system by what it does and not by the structure to perform the claimed invention.

Further still, the Examiner also notes that although computer hardware has been introduced it is being understood that the terms are just describing the software. That is to say, web service computer hardware architecture is just describing a type of configuration and that the claimed limitations are describing all of the software involved in a web service architecture. In other words, the amendment of computer hardware does not change the scope of the claim and is just being used to describe the web service architecture.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18. **Claims 1, 13, and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Mendelevitch (US PGPub 2003/0130993 A1)**.

19. In regards to **claims 1, 13, and 20 – 26, Mendelevitch** discloses a method for ranking services in a web services architecture having a hierarchy of services with a root originating service requestor, a service of a first level in the hierarchy calling a service of a lower level, the method comprising:

indicating a preference regarding at least one service and a ranking machine having a choice algorithm based on the preference (**Page 2 ¶ 14; Page 4 ¶ 47; wherein a user provides parameters into the system and a classification engine which provides confidence scores [rankings] is provided**);

finding a set of possible lower-level services by a service using a directory at each level of the hierarchy (**Page 2 ¶ 13; see also Claim 13; wherein a set of documents are searched through a database [directory] which is arranged in a hierarchy structure**); and

applying the choice algorithm to the set of possible lower-level services, wherein the lower-level services are selected from service requestors or service providers (**Page 3 ¶ 43 wherein computer code is executed and applied to the documents in the directory**);

referring the set of possible lower-level services to the ranking machine from the directory and returning a preferred sequence by the ranking machine to the directory, wherein the referring the set of possible lower-level services to the ranking machine from the directory is not visible to the service using the directory (**Page 1 ¶ 12; Page 4 ¶ 47, 49 – 53 wherein the classification engine receives the documents in order to process them by classifying and ranking the documents and wherein the processing is performed in the background, which obviously results in the processing being performed in a manger that is not visible to the user**); and

sending the set of possible lower-level services by the service using the directory to the ranking machine and returning a preferred sequence by the ranking machine to the service, wherein lower-level invocations of services in the hierarchy are not visible to higher-level services (**Page 1 ¶ 12; Page 4 ¶ 47, 49 – 53 wherein the classification engine receives the documents in order to process them by classifying and ranking the documents and wherein the processing is performed in the**

background, which obviously results in the processing being performed in a manager that is not visible to the user and wherein the final list of documents will be provided to the user after the process has been performed by the classification engine).

Mendelevitch discloses a method and system which provides a user (a requestor) with a classification engine that is connected (which obviously includes the use of a port) to a database in order to process documents in a database [directory]. Specifically, **Mendelevitch** provides a classification engine which takes into account the user's parameters in order to properly classify and rank the documents.

However, **Mendelevitch** fails to explicitly disclose wherein the documents are directed to services, i.e. lower-level services. Specifically, **Mendelevitch** fails to disclose:

- invoking services;
- set of possible lower-level services;
- service requestors or service providers;
- a UDDI directory;
- TModels; and
- XML.

However, the Examiner asserts that the data stored in the directory is directed to non-functional descriptive subject matter. That is to say, the type of data, i.e. lower-level services, level of services, service requestors, and service providers, does not affect how the method is carried out or stores the information. The type of data adds

little, if anything, to the claim's structure, and, thus, does not serve as a limitation on the claims to distinguish over the prior art. As claimed, the steps of the invention would be performed in the same manner regardless of the type of data that is being processed or stored.

With that said, it would have also been obvious to one having ordinary skill in the art of web services, and as admitted by the applicant in the Background, to have used a tModel, since a tModel is a data structure representing a service type in a UDDI registry. With that in mind, it is further asserted that one of ordinary skill in the art would have also recognized the use of XML using the said structure since a web service is described using a standard, formal XML notation, called a service description.

Consequently, it is asserted that one of ordinary skill in the art would have found it obvious to use a UDDI directory as a means of finding a service, and turning the set of data, i.e. tModel bags, into a set of tModels, wherein the underlying UDDI application code carries out the referral and appends the location of the ranker machine to subsequent XML flow, since all of the above processes are old and well known methods in the art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention that the sole difference between the primary reference and the claimed invention is that the primary reference does not disclose that the documents are directed to services, but would have realized that ultimately both are types of data. With that said, one of ordinary skill in the art would have recognized that each individual element and its function are shown in the prior art, albeit shown in separate references,

the difference between the claimed subject matter and the prior art rests not on any individual element or function but in the very combination itself- that is in the substitution of the documents, as taught by **Mendelevitch**, with the specific type of documents (data) describing services.

Thus, the simple substitution of one known element for another producing a predictable result renders the claim obvious.

20. In regards to **claim 27**, **Mendelevitch** discloses wherein the preference comprises at least one of ranking services in an order in which the originating service requestor intends to use the services, excluding services from being used, and providing other selection-influencing criteria (**Pages 4 – 5 ¶ 58 wherein other criteria (weighting schemes [threshold]) can be used in order to arrive at a final score**).

21. In regards to **claim 28**, **Mendelevitch** discloses wherein the preference is based upon quality of service criteria comprising at least one of cost, efficiency, speed, and reliability (**Page 1 ¶ 8 wherein efficiency is taken into account in order to determine the ranking and wherein one of ordinary skill in the art of ranking would have found it obvious that ranking criteria can be based on cost [such as savings], efficiency [how well one thing performs with another], speed [how fast can something be completed, performed, etc. in relation to others], and reliability [for example, is A more durable than B]**).

22. In regards to **claim 29**, **Mendelevitch** discloses wherein the preference overrides a selection by the service using the directory (**see at least Page 2 ¶ 13 and Claim 1(d) wherein the user can manually reclassify the documents**).

23. In regards to **claim 30, Mendelevitch** discloses wherein upon the preferred service not being available, a subsequent service is obtained by reference to original preference (**obviously included in that, as discussed above, the results are ranked and one having ordinary skill in the art would just move onto the next best item on the list).**

24. In regards to **claim 31, Mendelevitch** discloses wherein upon a stored preference not being available, the service using the directory making the selection (**as best understood by the Examiner, the system has a set of default algorithms for making the selections Page 4 ¶ 52).**

25. In regards go **claims 32 – 37**, the Examiner asserts these limitations to be non-functional descriptive subject matter and the intended use of the supposed computer hardware architecture.

The Examiner asserts that the claims are only disclosing method steps and types of data and fail to further limit the computer hardware architecture and, thus, are considered to be nothing more than non-functional descriptive subject matter. Moreover, the claims fail to set forth the specific hardware structure responsible for carrying out the claimed steps and, as a result, further assert that the method steps are only claiming type of data. The type of data adds little, if anything, to the claim's structure, and, thus, does not serve as a limitation on the claims to distinguish over the prior art.

A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to

patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

(10) Response to Argument

Rejections under 35 USC 112, first paragraph

26. The Examiner would like to note that **claim 31** is supposed to be included as part of the rejection and that it was a typographical error that the number is missing.

Claim 1

27. The rejection regarding the concept of "computer hardware" being new matter is **maintained**. Specifically, the Examiner asserts that the specification is silent on a computer performing the claimed invention. At best, the specification has support to a ranking machine, but the Examiner asserts that this is not a clear distinction as to whether it is a software program for ranking or a computer that has been specifically programmed to carryout the claimed invention. Although, the term "machine" is present the Examiner asserts that it does not necessarily mean that it is an actual tangible computer structure. For example, a "state machine" is not a machine, but the concept of evaluating nodes and determining possible solutions, i.e. states, from that node, such as left or right or on and off.

The appellant argues that the term "architecture" renders the invention to include a computer. However, the Examiner asserts that the specification does not provide any support for this interpretation. As discussed by the appellant, "Fig. 4B is described as 'a schematic block diagram of a web services architecture...,' and "the term architecture refers to 'the manner in which components of a computer or computer system are

organized and integrated.” In other words, the Examiner asserts that the usage of the term “architecture” is nothing more or equivalent to a schematic or diagrams that maps out how the method is being performed. That is to say, the claimed invention is directed towards a method for ranking services by referring to a directory or schematic of all pertinent web services, wherein the schematic provides a hierarchy of these web services. The claimed invention is directed towards the concept of ranking services or information in a specific environment, but does not necessarily mean that a computer is being provided for executing the code for performing the method.

28. The rejection regarding the concept of “the step of finding a set of possible lower-level services, by a service (i.e. the service finding a set of possible lower-level services” being new matter is **withdrawn**.

29. The rejection regarding the concept of a “database storing a hierarchy of services in which a service of a first level calls a service of a lower level” being new matter is **maintained**.

As discussed above, the appellant is attempting to claim a computer by including the concept of a database. However, as discussed above, the specification provides no support for a computer system and although the specification discloses a hierarchy of information, i.e. services, it does not necessarily mean that a computer or a database is being used. It is asserted that in the broadest reasonable interpretation that a piece of paper or filing system that has been broken down into categories or sub-categories reads over the storage of a hierarchy of information (services).

Rejection under 35 USC 112, second paragraph

Claim 1, 29, 30, 31

30. The Examiner **maintains** the rejection that the **step of ranking the services** must be included in the claims in order to determine the scope of the invention and allow one of ordinary skill in the art to determine whether or not they are infringing on the claimed invention. It is asserted that the claims must be clear and leave out any ambiguity on performing the claimed invention and relying on the knowledge of the reader is inappropriate. It is asserted that the body of the claim fails to satisfy the preamble in that the preamble discloses a method of ranking services, but fails to set forth the step of performing the ranking or when to perform the ranking.

The appellant provides the example of baking a cake and argues that it is unnecessary to inform cook to take out the cake. However, the Examiner respectfully disagrees. As is known in the art of cake baking it is absolutely crucial to be specific with cooking instructions as well as providing specific details as to when to remove the cake. Following the appellant's logic, the cook would assume that after the allotted cooking time has passed the cake needs to be removed immediately. However, this is not the case for every cake. It is well known in the art that some cakes require resting periods within the oven and can not be removed in order to avoid the cake from caving in. Without every step being provided, whether it is dealing with the claimed invention or baking a cake, it is imperative to include every step in order to avoid any errors, especially when the invention is specifically directed towards the ranking of services. Without each step specifically laid before a reader, the reader will not be able produce the same results as is intended by the inventor and instead of a cook having a cake that

is supposed to resemble a cylinder the cook will result in having a cake that resembles more of a volcano.

Regarding the **claims 29, 30, and 31**, the Examiner maintains the rejections for the same rationale provided above. In addition, just because the Examiner asked how it is done does not necessarily mean that question is in regards to enablement under 112, first paragraph. The Examiner asserts that rejections were directed to the claims being vague and indefinite because information was missing from the claims. It is asserted that because necessary steps were not being provided it was unclear as to how certain steps were being performed. It is equivalent to baking a Chiffon cake and telling the cook to mix the ingredients together and leaving out the important step of making sure that the eggs were beaten prior to mixing the dry mixture with the wet mixture. As a result, one would ask how and why their Chiffon cake looks different. It wasn't a matter of not knowing how to mix the ingredients and cooking them, but not knowing when certain steps were supposed to be performed. In other words, the instructions were vague and indefinite and resulted in having a different product that was intended even though the instructions had just enough information to sufficiently be enabled to create something that resembles the final product.

Finally, the Examiner asserts that if it not necessary to have any of these essential steps then the Examiner asserts that by this logic the prior art does not require any disclosure of these steps either and if one of ordinary skill in the art can simply assume what steps go where then one of ordinary skill in the art can do the same with the prior art.

As claimed, the method is simply directed to a method for indicating a preference, a ranking machine having a choice algorithm (what this choice algorithm is completely unknown and uncertain as to whether it is being used for ranking), invoking services (which is so broad that it could encompass simply looking at information regarding a service that happens to be associated with a hierarchy and it is uncertain how this plays a role in any of the later steps or executing the information about the service/document in order for it to be viewed), finding a set of possible lower-level services using a directory (which is interpreted as simply as a user looking at a directory, finding a service, and seeing if any there are any sub-services under it), and applying the choice algorithm (which simply makes no sense since what the algorithm is unknown and it is unknown how to apply the algorithm or with what).

Rejection under 35 US 101

31. As discussed above, the Examiner asserts that the claims fail to specifically disclose the steps of the claimed invention that are specifically being performed by a machine, i.e. a computer. As discussed above, a ranking machine does not necessarily limit the limitation to being performed by a computer. The claims fail to set forth limitations that specifically state or disclose that a computer has been provided to execute specific steps of the claimed invention. Applying the choice algorithm, in the broadest reasonable interpretation, can be understood as a user looking at a set of instructions and applying a series to steps to the set of possible lower-level services. Additionally, the Examiner asserts that “invoking services” is insufficient to disclose whether a computer is invoking those services.

Non-analogous art

32. Applicant argues that **Mendelevitch** is directed towards non-analogous prior art and cannot be properly applied against the claimed invention. Specifically, the applicant argues that **Mendelevitch** is directed to categorizing incoming documents into topics while the claimed invention is directed to ranking services in a web service architecture.

However, the Examiner respectfully disagrees.

Specifically, the Examiner has stated in the rejection that the type of data that is being analyzed is nothing more than non-functional descriptive subject matter. It is asserted that the claimed invention is nothing more than a program that allows a user to rank, i.e. reorganize, data. What that data is supposed to be is completely irrelevant to how the invention is carried out. One of ordinary skill in the art would have recognized that the claimed invention would perform the same regardless of what data is being analyzed.

USPTO personnel should inquire whether there should be a rejection under 35 U.S.C. 102 or 103. USPTO personnel should determine whether the claimed nonfunctional descriptive material be given patentable weight. USPTO personnel must consider all claim limitations when determining patentability of an invention over the prior art. *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 403-04 (Fed. Cir. 1983). USPTO personnel may not disregard claim limitations comprised of printed matter. See *Gulack*, 703 F.2d at 1384, 217 USPQ at 403; see also *Diehr*, 450 U.S. at 191, 209 USPQ at 10.

To be more specific, the Examiner asserts that the claimed invention is nothing more than the ranking of information and that one of ordinary skill in the art would have recognized that whether it is directed towards ranking services or documents the steps are still being performed the same.

Regarding the applicant's argument that **Mendelevitch** is only directed towards categorizing the information is incorrect. As seen in **Page 1 Paragraph 12**, **Mendelevitch** is directed towards classification and ranking.

As a result, the Examiner asserts that **Mendelevitch** is, indeed, analogous art since the claimed invention and **Mendelevitch** are both directed towards the ranking of information. Since the Examiner has clearly stated that **Mendelevitch** is analogous art and does, indeed, perform the steps as disclosed in the claimed invention it is being further asserted that the scope and content of the applied prior art are being properly characterized.

Additionally, the Examiner asserts that the concept of web services have not been positively recited into the body of the claims. That is to say, the body of the claims have not given breadth to the preamble of the claim, namely the usage of the web services. As stated in the claims, the invention is directed to a method for ranking services (even though the step of ranking has not been provided), i.e. the ranking of information about services (web services).

The Examiner asserts that the description identifying the information as "services" or "web services" is a label for the information and adds little, if anything, to the claimed acts or steps and thus does not serve to distinguish over the prior art. Any

differences related merely to the meaning and information conveyed through labels (i.e., the type of the item) which does not explicitly alter or impact the steps of the method does not patentably distinguish the claimed invention from the prior art in terms of patentability.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to rank services (web services) as well as documents as disclosed in the Mendelevitch reference because the type of information being ranked does not functionally alter or relate to the steps of the method and merely labeling the information being ranked differently from that in the prior art does not patentably distinguish the claimed invention.

33. The appellant argues that **Mendelevitch** fails to teach man many of the claimed limitations and that the “Examiner has failed to discharge the duty of performing a proper Graham analysis.”

However, KSR forecloses appellant’s argument that a specific teaching is required for a finding of obviousness. KSR, 127 S.Ct. at 1741, 82 USPQ2d at 1396. The above claims recite combinations which only unite old elements with no change in their respective functions and which yield predictable results. Thus, the claimed subject matter likely would have been obvious under KSR.

In addition, neither appellant’s Specification nor appellant’s arguments present any evidence that modifying **Mendelevitch** with the rationale provided by the Examiner was uniquely challenging or difficult for one of ordinary skill in the art. Under those circumstances, the Examiner did not err in holding that it would have been obvious to

one having ordinary skill in the art at the time of the invention was made to modify **Mendelevitch** to substitute the information that is being ranked from documents to services, especially when the services are not actually being used, i.e. the claimed invention is not implementing the services that are provided by web services.

Because this is a case where the improvements are no more than the predictable use of prior art elements according to their established functions, no further analysis is required by the Examiner. KSR, 127 S.Ct. at 1740, 82 USPQ2d at 1396.

34. The applicant further argues that **Mendelevitch** fails to teach or disclose:
"indicating a preference regarding at least one service..."
and that the configurable threshold appears to be unrelated to any service or document.

However, the Examiner respectfully disagrees.

Specifically, the Examiner points out that **Mendelevitch** discloses that a, "communication module configured to receive a plurality of documents from one or more sources...a ranking module configured to, for each document-topic associated, automatically determine a confidence score and computer the confidence score to a user configurable threshold (**Page 2 ¶ 14**)."

As can be seen here, **Mendelevitch** does, indeed, disclose that a preference (threshold) is being indicated and that it is in regards to a selected piece of information (see discussion above regarding non-functional descriptive subject matter and that documents and services can be used interchangeably without changing the steps of the invention). In other words, **Mendelevitch** discloses that the threshold is, indeed, related

to the document since it is being used by the ranking module in order to determine whether the document falls within the user's preference (threshold). That is to say, the ranking module uses the threshold (preference) indicated by the user as a means of ranking the documents.

35. The applicant further argues that **Mendelevitch** fails to disclose:

"finding a set of possible lower-level services, by a service, using a directory at each level of the hierarchy..."

and that the Examiner is disregarding the "precise language of the claims...."

However, the Examiner respectfully disagrees.

Once again, the Examiner asserts that the information is directed towards non-functional descriptive subject matter for the reasons stated above. **Mendelevitch** clearly discloses finding information using a directory at each level of the hierarchy. In other words, **Mendelevitch** discloses that the information is organized into a multi-level hierarchy directory and that the information can be found using this directory.

36. The appellant further argues that the type of information is absolutely necessary and crucial in order to carryout the concept of ranking. The appellant argues that one can not simply substitute the method of ranking services with the method of ranking documents or even with the method of ranking chicken.

However, the Examiner respectfully disagrees

A look at **claim 1** discloses the following:

A method for ranking services in a web services computer hardware architecture having a hierarchy of services with a root originating service requestor, a service of a first level in the hierarchy calling a service of a lower level, the method comprising:

indicating a preference regarding at least one service and a ranking machine having a choice algorithm based on the preference;

invoking services of at least one level of hierarchy;

finding a set of possible lower-level services, by a service, using a directory at each level of the hierarchy;

applying the choice algorithm to the set of possible lower-level services.

As can be seen above, the method is directed towards a method of ranking services. What the service is does not matter since, as discussed above, the type of service does not affect the step of indicating a preference, having an algorithm based on the algorithm, invoking the service of at least one level of hierarchy; finding a set of possible lower-level services by using a directory, and applying the choice algorithm to the set of possible lower-level services.

Now substituting the term “service” for documents produces the following:

A method for ranking documents in a document categorization computer hardware architecture having a hierarchy of documents with a root originating document requestor, a document of a first level in the hierarchy calling a document of a lower level, the method comprising:

indicating a preference (threshold) regarding at least one document and a ranking machine having a choice algorithm based on the preference;

invoking documents of at least one level of hierarchy;

finding a set of possible lower-level document, by a document, using a directory at each level of the hierarchy;

applying the choice algorithm to the set of possible lower-level document.

As can be seen, the simply substitution of the concept disclosed by **Mendelevitch** for services has not affected any of the steps that the method is disclosing. Having a method that is directed towards the ranking of documents has not affected the idea that the information is in a hierarchy since the documents are in categories (hierarchy), indicating a preference since, as discussed above, **Mendelevitch** discloses that a user configurable threshold is provided, a ranking machine having a choice algorithm that is based on threshold, invoking documents of at least one level of hierarchy since the documents can be accessed and viewed, finding a set of possible lower-level document using a directory since the documents are organized and classified into categories thereby allowing a user to filter through other documents that are related to a main document and/or topic, and applying the choice algorithm to the set of lower-level documents since the documents under the main document and/or topic can be accessed, viewed, and reviewed in order to determine if they meet the threshold established by the user.

As can be seen, nothing in the method has been changed or affected by simply substituting information pertaining to services with information pertaining to documents. At the end of the day, **Mendelevitch** has provided a system and method that allows for the classification and organization of information into topics (hierarchy), allows a user to find specific information within the classification, use the information (invoke), applying an algorithm based on a user configurable threshold (preference) to the lower-level information, and, although not claimed, ranking this information.

The same holds true for the appellant's example of ranking chicken by weight. That is to say, the user must establish a preference, such as ranking by 2 lb. increments or excluding anything less than 10 lbs., inputting, viewing, selecting desired information in order to view each weight category for each type of chicken (egg laying chickens, chickens raised to be eaten, young chickens, older chickens, etc.) (invoking), searching through a weight category for a specific type of chicken since they have been categorized (finding a set of possible lower-level services using a directory at least level of the hierarchy), and applying an algorithm to each category to see if it meets the desired weight requirement (applying the choice algorithm).

As a result, the information is, indeed, irrelevant and does not affect how the steps of the claimed invention are executed. In the end, regardless of what information is being used, i.e. services, documents, chickens, the result of the method will be the same, which is a method for ranking information. In addition, the Examiner would also like to state that one of ordinary skill in the art would have found it obvious that one cannot simply substitute the information discussed above with information that can not be ranked, such as substituting the term "services" for the term "the".

Other Matters

37. Regarding the argument provided on the bottom of page 19 to the top of page 20, the Examiner is uncertain as to what the appellant is attempting to argue. The Examiner can only state that many assumptions had to be made in order to understand the claimed invention in order to understand what is being claimed. The argument that because the step of ranking the services was omitted results in the claimed invention

being directed to more than the ranking of information is unclear and the Examiner is uncertain as to how to respond to this statement.

38. In regards to the applicant's example, which states:

"...if a method of numerically adding two inputs receives, as inputs, the letters "j" and "k," then the adding step is will not be performed."

However, the Examiner respectfully disagrees.

Specifically, the Examiner notes that the provided example is not appropriate for the claimed invention. As discussed above, the invention is directed towards ranking information and, as pointed out, **Mendelevitch** performs the step of ranking of information amongst other steps. There is no manipulation of the information in the claimed invention, only searching and reorganizing of the information. As such, what the information is supposed to contain is irrelevant. **Mendelevitch** is fully capable of searching and reorganizing (ranking) information.

Moreover, the Examiner also asserts that numerically adding two inputs, wherein the inputs are "j" and "k", is, indeed, possible and that the example fails to provide sufficient parameters to show otherwise. For example, if "j" and "k" are place holders in a piece of code and have been assigned numerical values, then it is possible to add the two letters to produce a number. Another example would be the manipulation of equations, such as those found in Thermodynamics, Fluid Dynamics, Algebra, and the like. It is asserted that the equations found in these subjects deal with the manipulation (including, but not limited to, adding, subtracting, integrals, multiplication, and etc.) of equations, which usually consist of nothing but letters, in order to produce a final

equation and substituting the corresponding numerical values or even producing a numerical value without the substitution of the numerical values.

39. Applicant argues that they have found other, “mischaracterizations as to the teaching of **Mendelevitch** and the differences between **Mendelevitch** and the claims. However, an identification of these additional mischaracterizations is unnecessary and redundant given the already identified deficiencies of **Mendelevitch**. ”

In response to this, the Examiner is assuming that the applicant is refraining from repeating the arguments mentioned and responded to above. However, if there are other supposed errors in the rejection the Examiner asserts that all the rejections are maintained due to the lack of a reply by the applicant in regards to distinctly and specifically point out the supposed errors in the Examiner’s action in the prior Office Action (37 CFR 1.111).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Gerardo Araque Jr.

/Gerardo Araque Jr./

Examiner, Art Unit 3689

April 22, 2010

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